



KSARC NEWS

KIKA DE LA GARZA SUBTROPICAL AGRICULTURAL RESEARCH CENTER
A RESEARCH LABORATORY OF THE AGRICULTURAL RESEARCH SERVICE
OF THE U.S. DEPARTMENT OF AGRICULTURE

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FROM OUR CENTER DIRECTOR DR. JERRY QUISENBERY

Making the KSARC campus secure is an ongoing process and although it seems like a crawl, we are making progress. Our nametags are now clearly visible to all who enter the campus. We see visitors walking around campus with "visitor" nametags. Our good friends at the Texas Experiment and Extension Center are also proudly wearing their nametags. Signs are up that direct visitors to check in at Building #200. Mail and packages are delivered only to Building #200 and are opened under secure conditions. A contract has been let out to change our door locks to a more secure configuration. Training has been held with the entire staff on computer security. All in all we have made significant progress in the year since the bombing of the New York Trade Center on 9-11-2001. One security expert told us that the goal of a security plan is to make your facilities more secure than most other buildings, as most terrorists are not real selective.

Now a series of brief notes on other campus activity. The renovation of our conference room in the Honeybee Laboratory is set to begin the first week in August. When this renovation is completed in about 45 days, the conference room will seat 85 to 110. In the fall we are initiating a series of seminars that will bring to KSARC some of the top national and international scientists and research administrators. The seminar committee chaired by Dr. Tom Sappington is hard at work lining up

speakers. Plans for our second All Staff Day are well underway. Co-chairs for the committee are Ms. Sonia Gallegos and Dr. Jesse De Leon. They promise "no gnats" for lunch. We are in the final phase of our updated modernization plan. In general, the plan consists of significant updates on our four main laboratories (Honeybee, Biocontrol, Organic and Remote Sensing, and Crop Quality and Fruit Insects), a proposed New International Food Security and Safety Laboratory for research related to problems associated with expanding trade due to NAFTA, and new field-type facilities at Rio-Delta Farms. Many people have been involved in this effort and I want to thank all of them for their time and commitment. Several of KSARC staff will be going to Monterrey, Mexico, on August 20th to work with their Mexican counterparts in completing a proposal for a joint attack on the Brown Citrus Aphid. Results from this meeting in the next newsletter.

Diane and I took our vacation the last of June and since this is the longest vacation I have ever taken, I must say a few words about it. We fell in love with Minnesota and its 10,000 lakes, wondered if anyone lives in Canada, were disappointed in Mt. Rushmore, and are still looking for Crazy Horse. We decided that North and South Dakota are not for us, saw more different types of barn construction, decided that we like the Comfort Inn the best (Continued on Page 8)

RESEARCH NEWS

KSARC Remote Sensing Group Holds Successful Workshop by James Everitt

- ♦ Dr. Patrick J. Moran, Research Entomologist in the Beneficial Insects Research Unit, and Ms. Connie Veland, Research Technician, have completed construction of 12 confined plots of water hyacinth plants in a reservoir at the KSARC North Farm. These plots are being used to study the effects of plant damage and chemical elicitor treatment on the growth of plant colonies from the plots. Later this summer, Dr. Moran will add waterhyacinth beetles to the plots to study the impact of early-season damage and elicitor treatments on biological control of waterhyacinth by the beetles.
- ♦ Drs. Allan Showler and Sholl Greenberg have completed a study that shows that boll weevils are deterred to a limited extent from feeding and oviposition on cotton squares when various formulations of neem are applied to the squares.
- ♦ Dr. Frank Elschen and Mr. Raul Rivera were invited to and presented talks at the 9th Annual Beekeeping Congress in Zacatecas, Mexico in May 2002.
- ♦ The June Issue of Agricultural Research magazine featured an article and photos of KSARC's Beet Armyworm research team on pages 20 and 21. (Drs. Tom Sappington, Sholl Greenberg, Allan Showler, Technician, Mr. Chuy Caballero and student, Mr. Peter Carreon are shown in the accompanying photos.) Also, in the same issue, the article, "Flying in the Face of Grapefruit" appears on pages 10-11. The article was featured front page in KSARC News April edition.

A Remote Sensing workshop was held at KSARC from June 4-7, 2002. The participants were from Virginia State University (1890 Historical Black University) in Petersburg, Virginia, Elizabeth City State University (Historical Black University) in Elizabeth City, North Carolina, and Southern University (Historical Black University) in Baton Rouge, Louisiana. Nine people attended the workshop. The participants are professors at these universities. The workshop was funded by a Capacity Building Grant awarded to Virginia State University. This grant covered the costs incurred for these nine people. We hosted this workshop at our facilities. The participants were introduced to all facets of our remote sensing research program including airborne remote sensing equipment and platforms, inspection of the ARS aircraft, precision agriculture, citriculture pest management, aquatic weed infestations and their detection and mapping with remote sensing technology, and hands-on use of field radiometers. The participants ultimately hope that the knowledge acquired through this and other workshops held at Virginia State University will help them to develop introductory courses on remote sensing at their universities. Both James Everitt and Reginald Fletcher have presented seminars and conducted training sessions at workshops held at these universities in the past, as they did at the June workshop.

Nutrition Facts

- ♦ In a recently published article in the American Journal of Clinical Nutrition, it was reported that after five years of studying 10,000 adults ages 24 to 75, that eating 3 servings of fruits and vegetables a day (a serving is an apple, a banana, a glass of pure juice, a tomato, a carrot, etc.) versus less than 1 serving, there was a:
 - 27% decrease in the occurrence of stroke
 - 42% decrease in death due to stroke
 - 24% decrease in death due to heart disease
 - 27% decrease in death due to cardiovascular disease i.e. clogged arteries, etc.
 - 15% decrease in all causes of heart-related death.

Your Mamma was right: eat your fruits and vegetables; it will help keep the doctor away. (Submitted by Dr. Gene Lester)

- ♦ At Least One Third of Your Food Should be Uncooked;
- ♦ There are valuable and sensitive micronutrients that are damaged when you heat foods. Cooking and processing food can destroy these micronutrients by altering their shape and chemical composition. Regular vegetable juicing will easily help you reach this goal of 1/3 raw food in your diet for optimal health. (Submitted by Annette Manzanares) Source: Optimal Wellness Center, Dr. Joseph Mercola.

♥ Heart-Healthy Recipe: Slow-Roasted Heirloom Tomatoes

Makes: 6 servings at 114 calories each; Preparation: 15 minutes

Ingredients:

6 medium tomatoes, in various colors (about 3 pounds)

1/4 cup extra-virgin olive oil

1/2 teaspoon salt

1/8 teaspoon black pepper

2 cloves garlic, finely chopped

1 1/2 teaspoons fresh thyme leaves

1 Tablespoon sherry wine vinegar



1. Heat oven to 250 degrees. Bring large pot of water to a boil. Core tomatoes. With small knife, make small crisscross cut through skin on end opposite cored end on each tomato.
2. Place each tomato in boiling water 30 seconds. Remove with slotted spoon and place immediately in bowl of ice water.
3. Peel skins from tomatoes. Cut tomatoes crosswise in half. Scoop out seeds.
4. Brush bottom and sides of 13 X 9 X 2-inch glass baking dish with some of the olive oil. Sprinkle half of the salt, pepper, garlic and thyme leaves over bottom of dish. Arrange tomatoes, cut side up, in dish. Sprinkle remaining olive oil, salt pepper, garlic, thyme and the vinegar over top of tomatoes.
5. Bake in 250 deg. oven 2 1/2 to 3 hours, until soft and just beginning to caramelize or darken, but still holding their shape. Spoon juices from bottom over tomatoes.

TRAVEL



3

VERMONT - THE GREEN MOUNTAIN STATE

Have you ever pictured a vacation spot where the vegetation is so green and lush that you can't stop staring at it and the water is so pure that you can cup your hands and reach into the stream and sip? If it sounds too good to be true, it isn't. Vermont fits the description. Tiny villages dot the pastoral scenery, unmarred by advertising billboards which are unlawful in the State. A visit to local eateries and inns for a meal rewards the traveler even more since food is grown organically and meticulously prepared. Robert Frost, one of America's most renowned poets, found the state so amazingly esoteric that he lived there for a period of 38 years and was inspired by his surroundings to write such poems such as "Mending Wall", "The Tuft of Flowers" and "The Road Not Taken", just to mention a few. The Robert Frost Interpretive Trail and Forest is located in Central Vermont and provides an opportunity for a relaxing walk. Posted along the trail are excerpts from some of Frost's most noted works. Nearby, is the Middlebury College Bread Loaf School of Languages, which Frost founded in 1920. Today, students from countries all over the world who are interested in learning a foreign language spend the summer on the Bread Loaf campus (so named for the shape of the mountain the school is built on) to become proficient in the language of their choice.



Tiny villages throughout the State take pride in the heritage of our Founding Fathers by planning free weekend concerts, parades and picnics. At the 4th of July a village parade and live Bluegrass, Jazz and and their dogs and everyone communes for a reminiscent of Norman Rockwell, who by the Vermont village life scenes as subjects for his museum dedicated to Rockwell is located in



The Von Trapp Family, Roger and movie "The Sound of Music" also make their

adventures first took us to the State almost 20 years ago, we had the pleasure of meeting and talking to the senior Mrs. Von Trapp who told us that when she came to Vermont it reminded her of her native Austria and she decided that is where she would spend the rest of her life. The family built a lodge on top of the mountains surrounding Stowe which is open to visitors and guests. Visitors can tour the grounds and climb the mountain to the hillside chapel, or they can stop by the beautiful Viennese Coffee House for coffee and homemade pastry, or just enjoy the beautiful views from the sitting room at the lodge.

If you're into flowers and herbs, take one of the many hiking trails and take a wildflower pocket guide with you to learn about Vermont's many wildflower varieties. You'll cross beautiful streams and see pristine lakes on your way and most likely, get to see some moose, deer, fox, and native black bears (be sure you're in good shape for running, just in case!) Whatever your preference, you'll return to the office feeling rested and stress-free.

Annette Manzanares



NEW BEGINNINGS



Chuy Maldonado was brimming with pride as he told me about the birth of his first granddaughter, Bryssa Renee Guzman, on May 14, 2002. Bryssa Renee is Chuy's daughter's (Yvette Guzman) and son-in-law's (Rene Guzman) fourth child and only girl. Bryssa Renee weighed in at 8 lbs., 2.5 ozs. and was 20 inches long at birth. Congratulations to the family!

Happy Birthday!

May

John Barrientes
Tyan Blessington
Raul Cantu
Emma Garcia
Shoel Greenberg
Victor Valladares

June

Jesus Caballero, Jr.
Patti Eken
James Everitt
Donald Makus
Daniel Moreno
Sandra Pedraza
Ismael Saenz
Enequina Suarez
Paul Thompson, Jr.
William Warfield
Julio Martinez, Jr.

July

Enrique Cabanillas
Isaac Dominguez
Frank Eischen
Valentina Greenberg
Walker Jones
David Robacker



Just the Facts by Mari Gomez

- Considering retirement? You should talk to Noelia Martinez about requesting an estimate of your retirement benefits. You can request the estimate as early as 3 years before your anticipated retirement date. The estimates are extremely helpful as you make retirement plans.
- Open season for Federal Long Term Care Program is July 1 through December 31, 2002. Check out for more information. The web site has an on-line application and a premium calculator. We are in the process of scheduling training for employees that are interested in the program.
- As part of USDA's Civil Rights Program, all employees will be required to complete two on-line training courses. "Understanding Conflict" (2.5 hours) which will be available online commencing July 29, 2002. A course titled "Equal Employment Opportunity" (2.5 hours) will be available by the end of September 2002. Both courses are to be completed by the end of the calendar year. Noelia Martinez will distribute more details as they become available.

NEW FACES AT KSARC

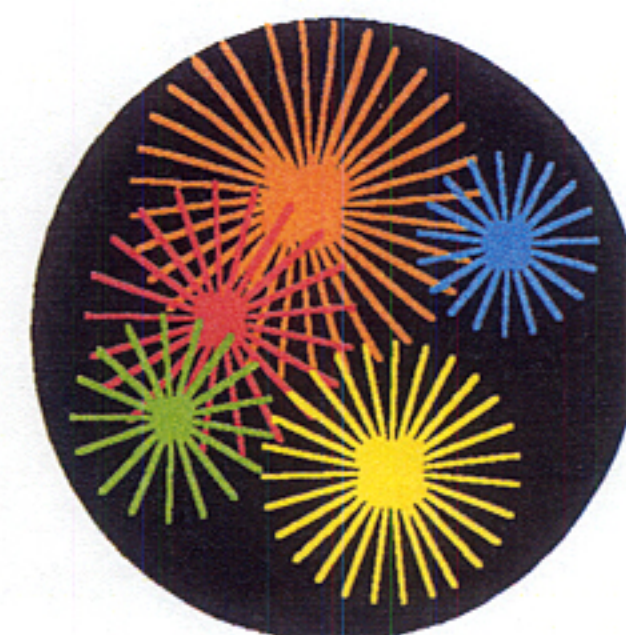
Ms. Joyce Parker is a new Student Temporary Employment Program (STEP) employee working for the summer in the lab of Dr. Patrick Moran of the Beneficial Insects Research Unit (BIRU). Joyce is a sophomore majoring in Biology at Texas A&M Univ.-Corpus Christi. Joyce will be assisting Dr. Moran in studies of biological control of waterhyacinth and pigweed.

Ms. Rosa Ruiz started working on May 20, 2002, with the BIRU as a Permanent Biological Science Technician



(Biochemistry) under the supervision of Dr. Don He. She is from the Department of Biology, University of Texas-Pan American.

- ♦ Ms. Marilyn Casas is a STEP Appointment Biological Science Technician working with the BIRU under the supervision of Dr. Walker Jones.
- ♦ Mr. Omar Landeros is working as a STEP Appointment Biological Science Aid in the Conservation and Production Systems Research Unit under the supervision of Dr. Larry Zibilske.
- ♦ Mr. Bob Cox joins us as a new Category III Entomologist in the Beneficial Insects Research Unit, Honey Bee Group.



40 Years of Ed Aren't Enough

by Phil Smith

Where were you in the early '60's? If you're Ed Stein, you were just getting your start with the Department of Agriculture.

On Wednesday of this week, I was pleased to host a surprise 40th anniversary party for Ed at the Area Office. The staff of the Area office was in attendance (a half dozen of whom weren't even born when Ed began his USDA career), as was his charming wife, Dolores, and Ted Shaver, a Retired Scientist who worked with Ed for many years. In the photo, Southern Plains Area Administrative Officer June Williams, SPA Cluster Environmental Protection Specialist Jim Simmons, and I are shown behind Ed and Dolores. Ed was hired as one of the Agency's original cluster environmental protection specialists in 1993. Among many successes in that role were his positive inputs into the REE industrial hygiene and video development committees; however I regard his most enduring achievement as being

the mountains of work he did in the late '80's and early '90's to bring the horribly complicated Brownsville/Weslaco soil remediation projects to successful conclusions. It's safe to say that those projects, which dragged on for seven years because we were operating in an area where regulations hadn't yet been written and because we were employing cutting-edge technologies which had never been applied to pesticide remediation, would have dragged on for an extra two or three years were it not for the effort that Ed put into them.

I know that you all respect Ed's opinion on safety, health, and environmental matters, but he holds a great deal of credibility with our scientists as well. This is because he spent more than three-quarters of his ARS career as a chemist and research chemist, authoring or co-authoring more than 20 papers in scientific journals during his tenure. He specialized in research on quality, shelf life, and nutritional value of subtropical food crops and citrus products. One of his scientific achievements was helping to identify where the hot pepper gets its heat. Prior to coming to the USDA, Ed was a school teacher, and he did a two year stint in the Army from 1953 to 1955.



Test Your Environmental Knowledge

NEETF Publications

From Ed Stein

The National Environmental Education & Training Foundation is an organization chartered by Congress in 1990. Its unique role is in the environmental education and training field. Its mission is to bring about a stronger economic, ecological, and social future through environmental learning.

The Organization developed the quiz below, which covers issues that have been discussed in the past. The questions are designed to tell how much accurate information people are getting from television, newspapers, magazines, and other sources.

Find out how much you know. Answers to the questions are given on the next page.

1. There are many different kinds of animals and plants, and they live in many different types of environments. What is the word used to describe this?

- a. Multiplicity
- b. Biodiversity
- c. Socio-economics
- d. Evolution

Don't Know

2. Carbon monoxide is a major contributor to air pollution. Which of the following is the biggest source of carbon monoxide? Is it.....

- a. Factories and businesses
- b. People breathing
- c. Socio-economics
- d. Tires

Don't Know

Environmental Questionnaire (Continued from Page 5)

3. How is much of the electricity in the U.S. generated? Is it.....
 a. By burning oil, coal, and wood Don't Know
 b. With nuclear power
 c. Through solar energy
 d. At hydroelectric plants
5. Which of the following is a renewable resource? Is it.....
 a. oil Don't Know
 b. iron ore
 c. trees, or
 d. coal
7. Where does most of the garbage in the U.S. end up? Is it.....
 a. oceans Don't Know
 b. incinerators
 c. recycling centers, or
 d. landfills
9. Which of the following household wastes is considered hazardous waste?
 a. plastic packaging Don't Know
 b. glass
 c. batteries, or
 d. spoiled food
11. Scientists have not determined the best solution for disposing of nuclear waste. In the U.S., what do we do with it now? Do we.....
 a. Use it as nuclear fuel Don't Know
 b. Sell it to other countries
 c. Dump it in landfills
 d. Store and monitor the waste
4. What is the most common cause of pollution of streams, rivers, and oceans? Is it.....
 a. Dumping of garbage by cities Don't Know
 b. Surface water running off yards, city streets, paved lots, land farm fields
 c. Trash washed into the ocean from beaches, or
 d. Waste dumped by factories
6. Ozone forms a protective layer in the earth's upper atmosphere. What does ozone protect us from? Is it.....
 a. acid rain Don't Know
 b. global warming
 c. sudden changes in temperature, or
 d. harmful, cancer-causing sunlight?
8. What is the name of the primary federal agency that works to protect our environment? Is it the
 a. Environmental Protection Agency (EPA) Don't Know
 b. Department of Health, Environment, & Safety (DEHS)
 c. National Environmental Agency (NEA) or
 d. Federal Pollution Control Agency (FPCA)
10. What is the most common reason that an animal species becomes extinct? Because.....
 a. Pesticides are killing them Don't Know
 b. Their habitats are being destroyed by humans
 c. There is too much hunting, or
 d. There are climate changes that affect them
12. What is the primary benefit of wetlands? Do they.....
 a. Promote flooding Don't Know
 b. Help clean the water before it enters lakes, streams, rivers, or oceans
 c. Help keep the number of undesirable plants and animals low, or
 d. Provide good sites for landfills

On the Fringe.....

- ♦ Mr. Raul Rivera of the Beneficial Insects Research Unit recently received an award from the USDA-Foreign Agricultural Service for hurricane reconstruction work of honey bee apiaries in the Dominican Republic last year and for presenting a honey bee disease and mite control workshop at Centro para Desarrollo Agropecuario y Republica Dominicana.

Grade:

11 or 12 correct = Pass

10 correct = Pass

9 correct = Pass

8 or fewer correct = Fail

Answers:

1. b; 2. c; 3. a; 4. b; 5. c; 6. d; 7. d; 8. a; 9. c;

10. b; 11. d; 12. b

KSARC Awards

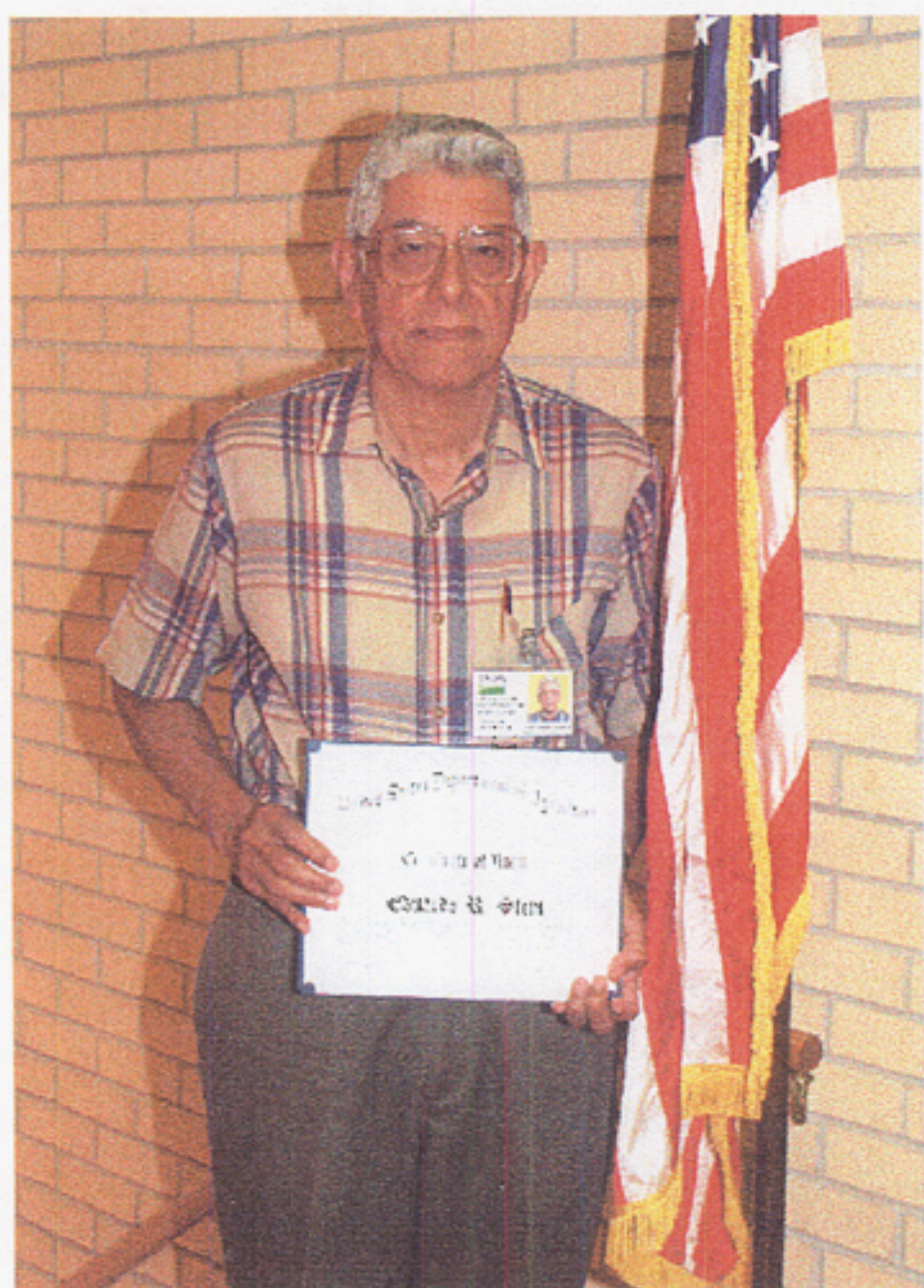
7



Center Director/Research Leaders (L to R): Dr. Robert Mangan, Dr. Joe Bradford, Dr. Jerry Quisenberry, and Dr. Walker Jones.



Crop Quality & Fruit Insect Research: (L to R) Dr. Robert Mangan, Ms. Sylvia Cano, Mr. Steven Neck, and Ms. Aleena Tarshis-Moreno.



Area Office: Mr. Eduardo Stein



Integrated Farming Research Unit: (Back Row L to R) Dr. Shoil Greenberg, Dr. Allan Showler, Mr. Jim Forward, Mr. Emilio Chavez, Mr. James Everitt, Dr. Joe Bradford, Dr. Tom Sappington; Middle (L to R) Ms. Veronica Cardoza, Ms. Irene Villarreal, Ms. Sandra Pedraza, Mr. Jesus Caballero; Front (L to R) Mr. Fred Gomez, Mr. Buck Cavazos, Mr. Victor Valladares, and Mr. Rene' Martinez.



Location Support: Back Row (L to R) Ms. Mari Gomez, Mr. Ramiro Balderas, Dr. Jerry Quisenberry, Mr. Eduardo Stein, Mr. Noe Hernandez; Front (L to R) Mr. John Barrientes and Mr. Rene'



Beneficial Insects Research Unit: Back Row (L to R) Mr. Arturo Cavazos, Mr. William Warfield, Dr. Walker Jones, Mr. Henry Graham, Ms. Connie Veland, Mr. Raul Rivera, Ms. Sonia Gallegos; Front Row (L to R) Mr. Carlos Gracia, Mr. Eloy Rodriguez, Ms. Emma Garcia and Mr. Frank de la Fuente.

Continued from Page 1 - Center Director

of all motels, bought so many things at an auction in Minnesota that we had to buy a camper shell to protect them, spent the Fourth of July lost in North Dakota, thought that the Ozarks in Arkansas are beautiful, but hot, and decided that there is no place like home when you have been gone for three weeks.



KSARC TO HOST DISTINGUISHED SPEAKER SERIES BY DR. TOM SAPPINGTON

Beginning this fall, ARS-KSARC will be hosting a series of six distinguished speakers per year from across the U.S., who will present seminars to ARS and Texas A&M personnel, as well as other interested persons from around the Valley. The speakers will be top scientists and administrators working in cutting-edge disciplines of relevance to the Rio Grande Valley or modern science. They will speak on topics that will appeal to a large and diverse audience, and so should be of interest to everyone at the Center. The seminars will be held in the conference room of the Honey Bee Building (Bldg. 213) which is being renovated to accommodate an audience of close to 100 people. The new conference room is scheduled to be ready by October, and will be named in honor of Dr. Bill Wilson who led the Honey Bee Research group here in Weslaco for many years. The seminar series will kick-off in October with Dr. Wilson as our first speaker, and will include a dedication ceremony. The second speaker

will be Dr. Kam Lulla from the NASA/Johnson Space Center in Houston, who will present a seminar on Dec. 6 tentatively titled, "Grand Challenges in Geospatial Sciences: Remote Sensing and Society." Dr. Lulla is Chief Scientist of the Earth and Imaging Sciences division at NASA, and is also the Chief of Astronaut Training in Earth Remote Sensing. Other speakers of similar high caliber are being lined up, and we hope to print a brochure within the next month or so with dates, seminar titles, and biographical information for each speaker. Members of the Seminar Committee include Jerry Quisenberry, Kate Aronstein, Jim Everitt, Patrick Moran, Tom Sappington (chair), Don Thomas, Larry Zibilske, and Annette Manzanares. Feel free to contact any member of the committee with suggestions or questions.



INSPIRATION CORNER.....

A WORLD FAMOUS LOSER

The late Earl Nightingale, writer and publisher of inspirational and motivational material, once told a story about a boy named Sparky. For Sparky, school was all but impossible. He failed every subject in the eighth grade. He flunked physics in high school, getting a grade of zero.

Sparky also flunked Latin, algebra, and English. He didn't do much better in sports. Although he did manage to make the school's golf team, he promptly lost the only important match of the season. There was a consolation match; he lost that too.

Throughout his youth, Sparky was awkward socially. He was not actually disliked by the other students; no one cared that

much. He was astonished if a classmate ever said hello to him outside of school hours.

There's no way to tell how he might have done at dating. Sparky never once asked a girl to go out in high school. He was too afraid of being turned down.

Sparky was a loser. He, his classmates..... everyone knew it. So he rolled with it. Sparky had made up his mind early in life that if things were meant to work out, they would. Otherwise, he would content himself with what appeared to be his inevitable mediocrity.

However, one thing was important to Sparky (See p. 9)

A World Famous Loser

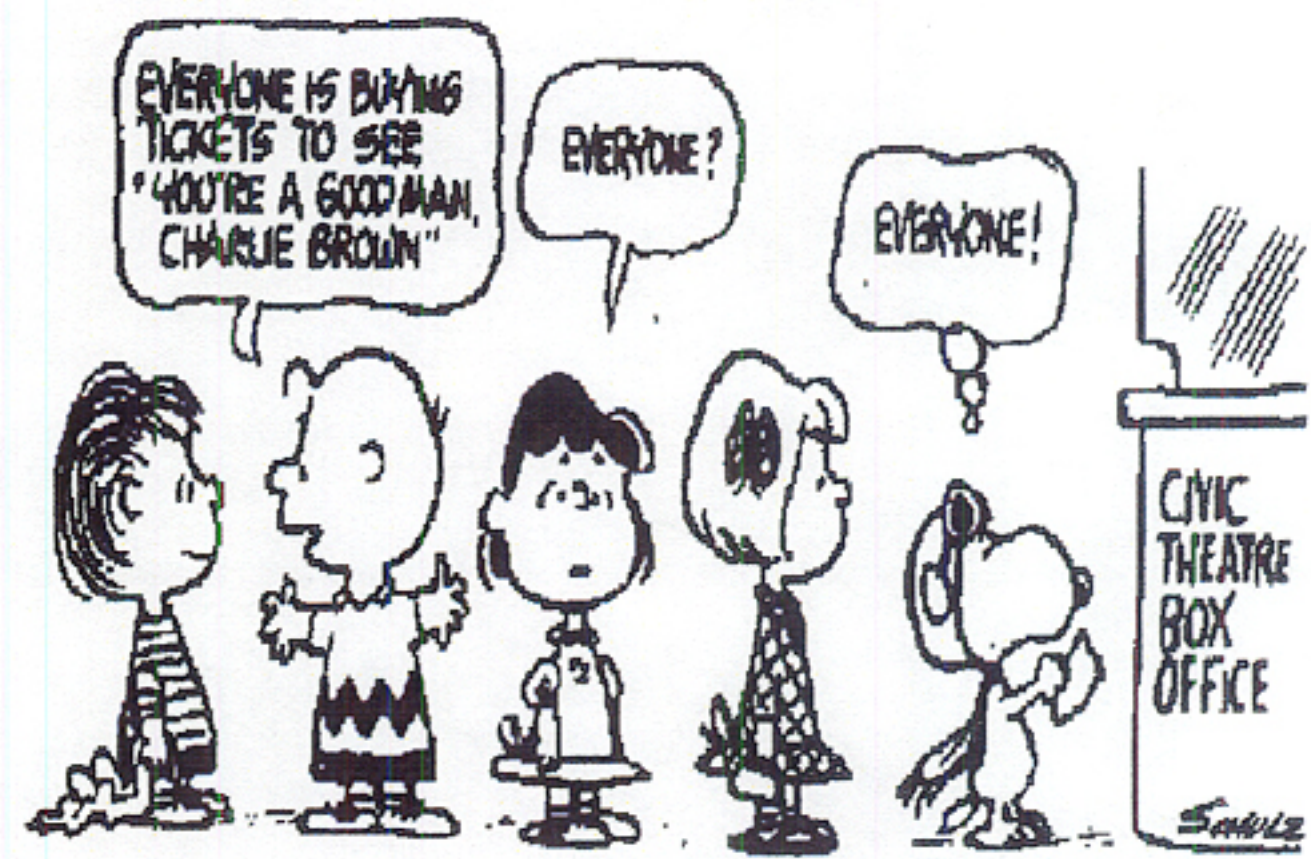
(Continued from p. 8)

-----drawing. He was proud of his artwork. Of course, no one else appreciated it. In his senior year of high school, he submitted some cartoons to the editors of the yearbook. The cartoons were turned down. Despite this particular rejection, Sparky was so convinced of his ability that he decided to become a professional artist.

After completing high school, he wrote a letter to Walt Disney Studios. He was told to send some samples of his artwork, and the subject for a cartoon was suggested. Sparky drew the proposed cartoon. He spent a great deal of time on it and on all the other drawings he submitted. Finally, the reply came from Disney Studios. He had been rejected once again. *Another loss for the loser.*

So Sparky decided to write his own autobiography in cartoons. He described his childhood self--a little boy loser and chronic underachiever. The cartoon character would soon become famous worldwide.

For Sparky, the boy who had such lack of success in school and whose work was rejected again and again, was Charles Schulz. He created the "Peanuts" comic strip and the little cartoon character whose kite would never fly and who never succeeded in kicking a football-----Charlie Brown.



The Road Not Taken

Robert Frost

TWO roads diverged in a yellow wood,
 And sorry I could not travel both
 And be one traveler, long I stood
 And looked down one as far as I could
 To where it bent in the undergrowth;
 Then took the other, as just as fair,
 And having perhaps the better claim,
 Because it was grassy and wanted wear;
 Though as for that, the passing there
 Had worn them really about the same,
 And both that morning equally lay
 In leaves no step had trodden black.
 Oh, I kept the first for another day!
 Yet knowing how way leads to way,
 I doubted if I should ever come back.
 I shall be telling this with a sigh
 Somewhere ages and ages hence:
 Two roads diverged in a wood, and I-
 I took the one less traveled by,
 And that has made all the difference.

For Information Regarding the KSARC Newsletter contact:

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The Agricultural Research Service conducts research to develop and transfer solutions to agricultural problems of high national priority and provides information access and dissemination to:

- ensure high quality, safe food and other agricultural products
- assess the nutritional needs of Americans
- sustain a competitive agricultural economy
- enhance the natural resource base and the environment, and
- provide economic opportunities for rural citizens, communities, and society as a whole.

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